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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/524,358	03/14/2000	Tatco Oishi	450100-02402	8951
20999 7590 02/13/2007 FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			EXAMINER NALVEN, ANDREW L	
			ART UNIT 2134	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE 3 MONTHS		MAIL DATE 02/13/2007	DELIVERY MODE PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

09/524,358

Applicant(s)

OISHI ET AL.

Examiner

Andrew L. Nalven

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 November 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 8-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.


**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 March 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
KAMBIZ ZAND  
PRIMARY EXAMINER

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

1. Claims 1-6 and 8-18 are pending.
2. Amendment submitted 11/20/2006 has been received and entered.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-6 and 8-18 have been considered but are moot in view of the new grounds of rejection.

### ***Claim Objections***

4. Claims 1, 8, and 13 are objected to because of the following informalities: the cited claims provide for an "integral multiple." Examiner believes the appropriate language should read "integer multiple." Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claims 1-6 and 8-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claim 1 recites the limitation "so that the data positioned in the same encryption block" in lines 15-16. There is insufficient antecedent basis for the limitation "the data" in the claim.

7. Claims 8 and 13 recite the limitation "so that the data positioned." There is insufficient antecedent basis for the limitation "the data" in these claims.

8. Claims 1, 8, and 13 and claims dependent therefrom are further indefinite because it is unclear to the Examiner how data positioned in an encryption block would ever be positioned outside of its compression block. The claims as currently presented require that data (assumed by the Examiner to be encrypted data) is stored such that an encrypted block is stored in the same compression block from where it came. However, because the claims provide that a block of compressed data is subsequently encrypted it appears that the encrypted compressed data would always be a part of the compression block. Clarification or correction is respectfully requested.

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1, 3-4, 6, 13 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshiura et al US Patent No 6,157,720.

11. With regards to claims 1 and 13, Yoshiura teaches processing means for compressing data in units of a compression block having a first data length (Yoshiura, column 4 lines 38-48), encrypting means for encrypting the compressed data in units of an encryption block having a second data length (Yoshiura, column 4 lines 48-58), wherein the first data length is a data length of an integer multiple of the second data length (Yoshiura, column 4 lines 48-49, integer multiple is 1), and control means for writing the encrypted data in said storage means so that the data positioned in the same encryption block is also positioned in the same compression block, said control means reading the data from said storage means in units of the compression block (Yoshiura, column 4 lines 56-58, column 8 lines 15-17). Yoshiura fails to teach the data being audio/visual data. However, Examiner maintains that it would have been obvious to one of ordinary skill in the art to apply Yoshiura's compression and encryption methods to audio/visual data because it would offer the advantage of reducing the storage space requirements of large audio/visual data files and would provide security for valuable intellectual property through encryption.

12. With regards to claims 3, 15, Yoshiura as modified teaches an encryption process using the block to be encrypted and a ciphertext from the previous block in the form of cipher-block chaining (Yoshiura, column 5 lines 5-12).

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13. With regards to claims 4 and 16, Yoshiura as modified teaches control means that manages the encrypted data stored in said storage means using a cluster containing one or more compression blocks and values initially used when encrypted an encryption block in one of said compression blocks (Yoshiura, column 4 lines 48-58, work key).

14. With regards to claim 6, Yoshiura as modified teaches the control means outputting data read out in compression block units into the processing means (Yoshiura, column 8 lines 15-17).

15. Claims 2 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshiura et al US Patent No 6,157,720, as applied to claims 1 and 13 above, and in further view of Bellovin et al US Patent No. 5,241,599.

16. With regards to claims 2 and 14, Yoshiura as modified above fails to teach the inserting of data into the processing block in order to adjust the data length so that it becomes a whole number multiple of the predetermined length. Bellovin teaches the insertion of data in order to meet the predetermined length of a block (Bellovin, column 10, lines 24-30). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Bellovin's method of inserting data because it offers the advantage of helps prevent partition attacks against encryption keys (Bellovin, column 9 line 54 – column 10 line 47).

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17. Claims 5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshiura et al US Patent No 6,157,720 as applied to claim 4 above, and further in view of Yuenyongsgool US Patent No. 6,202,152.

18. With regards to claims 5 and 17, Yoshiura as modified fails to teach the storing of processing blocks in the order of encryption (Hino, column 17 lines 21-38) at consecutive addresses. However, Yuenyongsgool teaches the storing of compression blocks in the order of encryption by consecutive addresses (Yuenyongsgool, column 2, lines 38-45). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Yuenyongsgool's method of consecutive address storage because it offers the advantage of helping accelerate information transfers from encrypted memory (Yuenyongsgool, column 2, lines 4-23).

19. Claims 8 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshiura et al US Patent No 6,157,720 in view of Bahout et al US Patent No. 5,594,793.

20. With regards to claim 8, Yoshiura as modified above in the rejection of claim 1 fails to teach a system for mutual identification between the storage and data processing apparatuses. However, Bahout teaches a system for mutual identification between the storage and data processing apparatuses using stored keys and algorithms within the data processor (Bahout, column 7, lines 7-25). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to

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utilize Bahout's mutual identification method because it offers the advantage of giving the system a degree of inviolability by ensuring that data processor only functions with a specific storage device (Bahout, column 1, lines 9-16 and 55-60).

21. With regards to claim 10, Yoshiura as modified teaches an encryption process using the block to be encrypted and a ciphertext from the previous block in the form of cipher-block chaining (Yoshiura, column 5 lines 5-12).

22. With regards to claim 11, Yoshiura as modified teaches control means that manages the encrypted data stored in said storage means using a cluster containing one or more compression blocks and values initially used when encrypted an encryption block in one of said compression blocks (Yoshiura, column 4 lines 48-58, work key).

23. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshiura et al US Patent No 6,157,720 and Bahout et al US Patent No. 5,594,793, as applied to claim 8 above, and in further view of Bellovin et al US Patent No. 5,241,599.

24. With regards to claim 9, Yoshiura as modified above fails to teach the inserting of data into the processing block in order to adjust the data length so that it becomes a whole number multiple of the predetermined length. Bellovin teaches the insertion of data in order to meet the predetermined length of a block (Bellovin, column 10, lines 24-30). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Bellovin's method of inserting data because it offers the advantage of helps prevent partition attacks against encryption keys (Bellovin, column 9 line 54 – column 10 line 47).



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25. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshiura et al US Patent No 6,157,720 and Bahout et al US Patent No. 5,594,793, as applied to claim 11 above, and further in view of Yuenyongsgool US Patent No. 6,202,152.

26. With regards to claim 12, Yoshiura as modified fails to teach the storing of processing blocks in the order of encryption (Hino, column 17 lines 21-38) at consecutive addresses. However, Yuenyongsgool teaches the storing of compression blocks in the order of encryption by consecutive addresses (Yuenyongsgool, column 2, lines 38-45). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Yuenyongsgool's method of consecutive address storage because it offers the advantage of helping accelerate information transfers from encrypted memory (Yuenyongsgool, column 2, lines 4-23).

### ***Conclusion***


27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew L. Nalven whose telephone number is 571 272 3839. The examiner can normally be reached on Monday - Thursday 8-6, Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on 571 272 3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew Nalven

  
KAMBIZ ZAND  
PRIMARY EXAMINER